Commonwealth of Kentucky
Division for Air Quality

PERMIT APPLICATION SUMMARY FORM

Completed by: Timothy J. Rust

GENERAL INFORMATION:

Name:	Morehead State University
Address:	PO Box 831 Morehead, Kentucky 40351
Date application received:	October 10, 2005
SIC/Source description:	8221, College or University
Source ID #:	21-205-00005
Source A.I. #:	3873
Activity #:	APE20050001
Permit number:	V-05-074

APPLICATION TYPE/PERMIT ACTIVITY:

[ ] Initial issuance	[ ] General permit
[ ] Permit modification	[ ]Conditional major
__Administrative	[X] Title V
__Minor	[ ] Synthetic minor
__Significant	[X] Operating
[X] Permit renewal	[ ] Construction/operating

COMPLIANCE SUMMARY:

[ ] Source is out of compliance [ ] Compliance schedule included

[X] Compliance certification signed

APPLICABLE REQUIREMENTS LIST:

[ ] NSR	[X] NSPS	[X] SIP
[ ] PSD	[ ] NESHAPS	[ ] Other
[ ] Netted out of PSD/NSR	[ ]	Not major modification per 401 KAR 51:001, 1(116)(b)

MISCELLANEOUS:

[ ] Acid rain source

[ ] Source subject to 112(r)

[ ] Source applied for federally enforceable emissions cap

[ ] Source provided terms for alternative operating scenarios

[X] Source subject to a MACT standard

[ ] Source requested case-by-case 112(g) or (j) determination

[ ] Application proposes new control technology

[X] Certified by responsible official

[ ] Diagrams or drawings included

[ ] Confidential business information (CBI) submitted in application

[X] Pollution Prevention Measures

[ ] Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

Pollutant	Actual (tpy)**	Potential (tpy)
PM/PM_{10}	107.5	112.9
SO_2	93.5	554.2
NOx	37.3	198.3
CO	34.8	133.5
VOC	3.5	8.8
LEAD	0.04	0.25
Single HAPs (HCL)	N/D	21.2
Source wide HAPs	N/D	38.2

** Actual values derived from EIS 2004 Emissions Inventory Report

SOURCE DESCRIPTION:

Morehead State University has applied to the Division for Air Quality for the renewal of their Title V permit (V-99-052, Revision 1) for the operation of three steam boilers, coal & ash handling operations, coal storage and natural gas piping facilities. The existing emission sources include a 76 mmBtu/hr rated Spreader stoker coal-fired indirect-heat-exchanger with multicylcone and baghouse (emission unit 02); a 36.7 mmBtu/hr rated Underfeed stoker coal-fired indirect-heat-exchanger with multicyclone (emission unit 03); a 31 mmBtu/hr gas fired, Scotch Marine Fire tube steam boiler (emission unit 04); and insignificant activities (coal/ash handling and waste incinerator).

EMISSIONS AND OPERATING CAPS DESCRIPTIONS:

Prior to September 13, 2007, for emission Unit 02, pursuant to 401 KAR 61:015, Section 4(1), particulate emissions shall not exceed 0.27 lb/mmBtu based on a three-hour average and Section 5(1), sulfur dioxide emissions shall not exceed 6.07 lb/mmBtu based on a twenty-four hour average. Beginning September 13, 2007, pursuant to 401 KAR 63:002, incorporating by reference 40 CFR 63 subpart DDDDD Table 1 (9), particulate matter emissions shall not exceed 0.07 lb/mmBtu, hydrogen chloride emissions shall not exceed 0.09 lb/mmBtu, mercury emissions shall not exceed 0.000009 lb/mmBtu (all based on a three-hour average); and sulfur dioxide emission limitations shall be identical as before pursuant to 401 KAR 61:015, Section 5(1).

Prior to September 13, 2007, for emission Unit 03, pursuant to 401 KAR 59:015, Section 4(1), particulate emissions shall not exceed 0.28 lb/mmBtu based on a three-hour average and Section 5(1), sulfur dioxide emissions shall not exceed 1.36 lb/mmBtu based on a twenty-four hour average. Beginning September 13, 2007, pursuant to 401 KAR 63:002, incorporating by reference 40 CFR 63 subpart DDDDD Table 1 (9), particulate matter emissions shall not exceed 0.07 lb/mmBtu, hydrogen chloride emissions shall not exceed 0.09 lb/mmBtu, mercury emissions shall not exceed 0.000009 lb/mmBtu (all based on a three-hour average); and sulfur dioxide emission limitations shall be identical as before pursuant to 401 KAR 59:015, Section 5(1).

For Emission Unit 04, pursuant to 401 KAR 59:015, Section 4(1)(c), particulate emissions shall not exceed 0.27 lb/mmBtu based on a three-hour average and Section 5(1)(c), sulfur dioxide emissions shall not exceed 0.84 lb/mmBtu based on a twenty-four-hour average.

In addition, the permittee shall monitor for Emission Units 02, & 03 the amount of fuel combusted on a weekly basis and for Emission unit 04 the natural gas usage on a daily basis. Emission factors were obtained from indirect heat exchanger manufacturers specifications and from AP-42.

For Emissions Units 02, 03, & 04, pursuant to 401 KAR 61:015, Section 4(2) and 401 KAR 59:015, Section 4(2), visible emissions shall not exceed twenty (20) percent opacity based on a six minute average, except that a maximum of forty (40) percent opacity shall be permissible for not more than six (6) consecutive minutes in any sixty (60) consecutive minutes during cleaning the fire box or blowing soot. Beginning September 13, 2007, for Emission Units 02 & 03, pursuant to 40 CFR 63 subpart DDDDD Table 2 (2)(b), the opacity exception shall change to one six-minute period per hour of not more than twenty-seven (27) percent opacity. When each unit is in operation, the permittee shall read, weather permitting, the visible emissions using U.S. EPA Reference Method 9 once per week. For Emission Unit 02, pursuant to 40 CFR §63.7525(b), a Continuous Opacity Monitoring System must be installed, operated, certified, and maintained by the compliance date of September 13, 2007.

OPERATIONAL FLEXIBILITY:

No operational limitations are in place for each of these emission points.